

Tug Newsletter

all about tugs



PSA Marine Singapore in 2019 added the **LNG dual-fuel** newbuild harbour / coastal shiphandling tug PSA ASPEN to the fleet. Built by PaxOcean Shipyard the RAmports 2800-DF design measures 447 GT. Dimensions are 28,2 (oa) x 11,5 (mld) x 5,5 m. Maximum navigational draught 4,6 m. Bollard pull is 56 tonnes. Main engines are two Niigata 6L-28AHX dual-fuel, each 1.618 kW at 750 rpm (4.400 bhp total). Fitted with Niigata ZP-31 Z-Peller azimuthing thrusters with 220 cm diameter fixed-pitch propellers and zero-to-idle slipping clutches. LNG storage tank and gas fuel system supplied by Gloryholder Liquefied Gas Machinery. Gas is stored in the 25 m3 vacuum insulated IMO Type C LNG storage tank. This is the third LNG-fuelled tug in Singapore after the Keppel-Smit / Maju duo. In addition to eliminating SOx and particulate matter emissions while achieving 80% NOx emissions reduction, the operation

of the harbour tugs in LNG mode has also achieved about 20% reduction of CO2 and 15% lower noise levels.

The towing winch forward is of the MacGregor MG-HTW1-*513U02276x2 hydraulic single split drum type. Drum

capacity is 220m x 76 mm diameter synthetic rope (work drum as well as the standby drum). Brake capacity is 125 tonnes static on the first layer of the work drum. Brake capacity on the standby drum is 30 tonnes static on the first layer. Slack line pull 1,0 tonne at 0-40 m.min. The



The former demo tug PHOENIX seen here on 1 July, 2023

photo: Nico Giltay

TugZine
all about tugs

media partner of

ITS 2024 The 27th **International Tug & Salvage Convention, Exhibition & Awards**
DUBAI
In association with **CATERPILLAR** | 21 - 23 May 2024



WERF 't KROMHOUT III demonstrating reliability during the 1905 contest in Southampton
 photo: from the book Kagen, Clippers, etc. / coll. Job van Eijk

anchor winch is situated on the aft deck is also by MaGregor. It holds 172 m x 24 mm diameter wire with 5 m x 19 mm diameter chain on the anchor. A Palfinger PK-12000-deck crane with a capacity of 17,0 tonnes at 6,1 m outreach completed the deck gear.

The photo shows PSA ASPEN on 14 September, 2023, at work at the Pasir Panjang Terminal, Singapore
 photo: Maasmond Maritime / Piet Sinke

International Tug & Salvage Convention

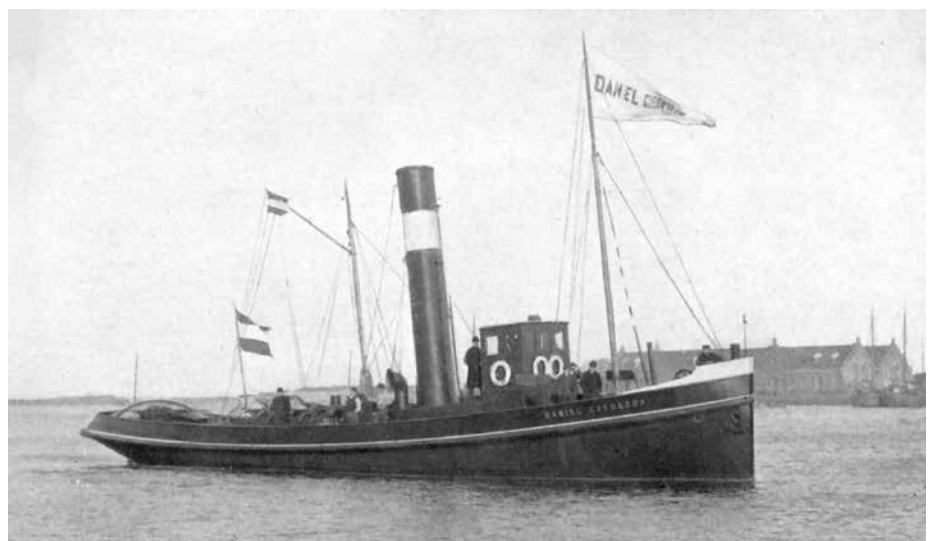
This 27th Convention - when compared with the earlier conventions - illustrates the enormous steps that have been made in tug technology. A lot of current development has to do with the search for alternative fuel sources. To date there is no consensus on what type of fuel will be best suited as a replacement to fossil. There is no uniform transition fuel agreed upon and it seems unlikely that this will be so in the near future. For now it looks likely that solutions will have to be either tailor-made for certain operational areas and operating windows or use easier solutions which for the time being have to be part fossil.

Decarbonisation and (availability of) future fuels therefore will be prominent on the agenda of this convention. Energy density of the new fuels will be of prime importance - some will be suitable for niche operations only. A problem in all this is that once a solution is fitted in the tug it will have to stay there for at least 20-30 years pinning the vessel to certain specific locations thus reducing flexibility. Hopefully the Convention will result in

some pointers to where we can go. Note the advertisement in these pages on how to join this important bi-annual event - which will be money well spent, not only for the papers and the exhibition but perhaps even more important to discuss developments with others and it would not be surprising if some business deals could also be made.

Demo Tug

The tug *Phoenix* as she is named today is a vessel with historic roots. She was built in 1912 as *Kromhout VIII* at the shipyard 't Hondsbosch, Alkmaar, The Netherlands. Yard number 679 was constructed to the order of the Kromhout Engine Works. The design was by one of the owners of Kromhout, mr **Goedkoop** - a name well-known in shipping circles operating in the Amsterdam area.



The tug DANIEL GOEDKOOP was constructed in 1903 for account of another Goedkoop family member. The 300 ihp steam tug was sold already in 1907 to Braila. Her replacement was the 1909-built DANIEL GOEDKOOP
 photo: from the book Kagen, Clippers, etc. / coll. Job van Eijk

The tug was designed specifically as a **demonstration vessel** for their new Kromhout 2-cylinder 2M engine, the first of which was installed in this vessel.

The use of a demonstration vessel was not the first time Kromhout (Goedkoop) made use of this marketing tool. **The first** such vessel was the tug *Werf 't Kromhout III* which was used to market Goedkoop's 1-cylinder 4-stroke petroleum-fired 12 hp engine, built in 1904. Of this engine and the more powerful 24 hp version a total of 577 units were constructed over the period 1905 to 1929 when production was ceased.

An example of effective marketing

happened in 1905. In order to show the capabilities of the engine to the British market the demonstration vessel was sailed across The Channel. In August of that year the vessel was entered into a durability competition held at Southampton. *Werf 't Kromhout III* became first out of 32 contestants as well as with zero penalty points. A few days later the London-based **Asiatic Petroleum Co.** ordered a 24-hp engine for installation in a new company tender for service at Hong Kong. Shortly afterwards the same company ordered two such engines for installation in a tug which was to be based at Singapore. When the vessels arrived in Singapore nobody was able to start the engines. This necessitated Kromhout to send a mechanic - mr Schrameyer - out to the Far East. Inspection showed no problems and after a demonstration of the starting



sequence the engines ran perfectly. Later he also travelled to Foochow and Singapore to perform his magic.

The engine plant started out as part of the **Kromhout Shipyard**. This yard was established at Amsterdam in 1757 by Neeltje Hendrik de Vries and her husband, Doede Jansen Kromhout, a ship's carpenter. The yard changed hands several time although the name was retained. In 1867 **Daniël Goedkoop Sr.** purchased the yard which was to be run by his son Daniël Goedkoop Jr. and his son-in-law Johannes Kloos. The latter left the yard in 1873. The crisis years of 1884 were used by Goedkoop to modernise the yard. In 1894 Daniël Sr's son Daniël became Yard Director followed in 1899 by another son, Jan Goedkoop. **Jan Goedkoop** was less interested in shipbuilding than he was in engineering. It was he that developed the engine works and in 1901 the production of engines began in earnest. In 1908 the Kromhout Engine Works were transferred to a new location in order to be able to expand production. By 1911 the engine works were the major



*PHOENIX seen here on 17 November, 2023. The former demo-tug is now in use for recreational purposes
photo: Ruud Zegwaard*

earner so it was decided to sell the yard to messrs Ceuvel.

New types of engines were developed and in the 1930s the road transport market was entered with Gardner diesels which they constructed under the name of Kromhout-Gardner. Post WW2 things did not develop as had been hoped not in the least because of differences of opinion within the Board

about which path to follow. Kromhout over the years also constructed a wide array of equipment outside the maritime market, such as locomotives for the mining industry, all kinds of machining tools, busses, trucks, a moped engine and even jet engines for helicopters.

The end came in the late 1960s. In 1966 an amalgamation of Kromhout and Stork resulted in the continuation

 **The 27th International
Tug & Salvage Convention,
Exhibition & Awards**

 21-23 May 2024

 Dubai

 tugandosv.com/ITS2024

In association with
CATERPILLAR®

**Join us in Dubai for the world's premier biennial
gathering of the tug, towage and salvage community!**

**REGISTER
HERE**


Conference


Exhibition


Awards


Social Events

For all enquiries, please contact:
Indrit Kruja, Brand Manager
t: +44 20 8370 7792
e: indrit.kruja@rivieramm.com



Event partners



Strategic partner



Destination partner



Media partner



Brought to you by





Kooren's RT BORKUM is a modern 'demo' tug

photo: Nico Giltay

of construction of high-speed diesel engines which were produced at Zwolle. In 1967, however, the last-ever Kromhout left the works.

Another branch of the Goedkoop family tree was their shipping business that finally found its way into **Goedkoop Harbour Towing**. The Goedkoop maritime business was started in the 1600's when they were known to be involved in the peat business and also as skippers transporting peat and other goods to the buyers. By the 1820's a branch of the family had set itself up in Amsterdam running maritime transport and ferry business. In 1862 they started their towing business. From 1852-1887 they were also owners of a number of **sailing vessels** for coastal and deepsea service in the form of, amongst others, schooners, brigs, barques and frigates. The Goedkoop's much later also purchased the **Wijsmuller** towing and salvage company after the death of its owner, a sale at the instigation of the banks to recoup their investments. Many years later, this was reversed when Wijsmuller purchased the Goedkoop towing business, but that is another story altogether.

The tug *Phoenix* with which we started the story has dimensions of 21,30 x 5,16 x 2,85 m with a draft of 2,10 m. *Kromhout VIII* was sold by Kromhout in 1915 as *Voorwaarts* to the Dutch Royal Navy. In 1924 transferred to the Dutch Ministry of Finance for

use as a fishery policing vessel in the province of Zeeland. 1939 returned to the Navy. 1940 scuttled. Same year raised by the German occupying forces. Repaired and re-engined with 120 hp Skoda. 1945 repossessed by the Ministry of Finance. 1954 Dutch Royal Navy as *Voorwaarts - Y 8114* again as policing and communication vessel. 1960 transferred to Den Helder. 1967 offered for sale. 1968 sold to Stolk, Hendrik Ido Ambacht, for scrap. 1969 to J. & G. van der Marel, Viane, as *Y 8114*. 1971 to L.J. Stevens, Vlissingen, as *Moby Dick*. 1971 to H.F. Heyting, Eindhoven, renamed *Phoenix*. 1973 re-engined with 3-cylinder Bolnes 3L diesel, 150 bhp. 2012 to W.P. Klapwijk, Krimpen aan de Lek. 2021 to J.R.H. Kervezee, Ouderkerk aan de Amstel.

Sources: Kagen, Clippers, Werven en Motoren - geschiedenis van een geslacht van schippers, reeders, scheepsbouwmeesters en motorenfabrikanten te Amsterdam (1942 - Dr. J.C. Westermann); 78.000 pk - chapter Zwartsluis tot Kromhout motor (2004 - Vereniging de Motorsleepboot); website Kromhout Archief; website Sleep-en Duwvaart (for the tug history); archives J. van Eijk; Sleepboten, bokken en bergingsvaartuigen in de Amsterdamse haven (1966 - Arie van der Veer).

TugeNewsletter

is published at minimum every odd month in digital format only.

Editor

Job van Eijk

Co-editor

Cock Peterse

Advertising

Frank van Gils

DTP

Dtpplus - Spijkenisse

Branding & Webdesign

Studio DBLY - Rotterdam

Publisher

TugDoc International

ISSN 2667-2456

Editorial address

editor@tugezine.com

Website

<https://www.tugezine.com>

Contacts

TugDoc International

De Houtmanstraat 92
3151 TE Hoek van Holland
The Netherlands
Email: info@tugdoc.nl

Frank van Gils

Van Gils Promotions
Tel: +31 (0) 653 888 26
Email: frank.van.gils@planet.nl

Subscriptions

TugeZine as well as its associate TugeNewsletter is distributed free of charge. Copies will be emailed to subscribers in PDF format. Subscribers also have access to service pages and archives on the website. To subscribe visit tugezine.com and register.

Copyright

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written permission of the publisher, or the copyright holder. Copyright © 2024 TugDoc International. Information published in the TugeZine and TugeNewsletter does not necessarily represent the views of the editors or the publisher. Whilst effort is made to ensure that the information provided in the TugeZine and TugeNewsletter is accurate, the publisher makes no representation or warranty, express or implied, as to the accuracy, completeness or correctness of such information. It accepts no responsibility whatsoever for any loss, damage or other liability arising from any use of this publication or the information which it contains.